

What is claimed is:

1. A method for identifying compounds useful for modulating body weight, the method comprising:
 - contacting a test compound with a mammalian sequence #115;
 - determining whether the test compound binds to the mammalian sequence #115;and
 - identifying a compound that binds to the mammalian sequence #115 as a compound useful for modulating body weight.
2. A method for identifying compounds useful for modulating body weight, the method comprising:
 - contacting a sequence #115 ligand with a mammalian sequence #115 in the presence and absence of a test compound;
 - determining whether the test compound alters the binding of the sequence #115 ligand to the mammalian sequence #115; and
 - identifying a compound that alters the binding of the sequence #115 ligand to the mammalian sequence #115 as a compound useful for modulating body weight.
3. The method of claim 1, wherein the mammalian sequence #115 is expressed on the surface of a recombinant cell.
4. The method of claim 2, wherein the mammalian sequence #115 is expressed on the surface of a recombinant cell.
5. The method of claim 3, wherein the recombinant cell is an eukaryotic cell.
6. The method of claim 4, wherein the recombinant cell is an eukaryotic cell.

7. A method for identifying compounds useful for modulating body weight, the method comprising:

contacting a test compound with a cell expressing a mammalian sequence #115; determining whether the test compound alters activity of the mammalian sequence #115; and

identifying a compound that alters activity of the mammalian sequence #115 as a compound useful for modulating body weight.

8. The method of claim 7, wherein the activity of mammalian sequence #115 is determined by measuring the level of cAMP in the cell.

9. The method of claim 7, wherein the activity of the mammalian sequence #115 is determined by measuring the level of cytoplasmic Ca^{2+} in the cell.

10. The method of claim 8, wherein the cell further contains a reporter gene operatively associated with a cAMP responsive element, and the level of cAMP is measured by measuring expression of the reporter gene.

11. The method of claim 10, in which the reporter gene is alkaline phosphatase, chloramphenicol acetyltransferase, luciferase, glucuronide synthetase, growth hormone, or placental alkaline phosphatase.

12. The method of claim 7, wherein the activity of the mammalian sequence #115 is measured by measuring intracellular inositol 1,4,5-trisphosphate (1P3).

13. The method of claim 7, wherein the activity of the mammalian sequence #115 is measured by measuring intracellular 1,2-diacylglycerol (DAG).

14. The method of claim 1, wherein the mammal is a mouse.

15. The method of claim 2, wherein the mammal is a mouse.
16. The method of claim 7, wherein the mammal is a mouse.
17. A pharmaceutical formulation for the modulation of body weight, comprising a compound that modulates the activity of a mammalian sequence #115, mixed with a pharmaceutically acceptable carrier.
18. A package comprising the pharmaceutical formulation of claim 17 and instructions for administering the pharmaceutical formulation for the purpose of modulating body weight.
19. A method for preparing a pharmaceutical composition useful for modulating body weight, the method comprising:
 - contacting a test compound with a mammalian sequence #115;
 - determining whether the test compound binds to the mammalian sequence #115;
 - and
 - combining the test compound that binds to the mammalian sequence #115 with a pharmaceutically acceptable carrier to create a pharmaceutical composition useful for modulating body weight.
20. A method for the treatment of obesity comprising administering, to a patient in need thereof, the pharmaceutical composition according to claim 19.
21. A method for the treatment of cachexia comprising administering, to a patient in need thereof, the pharmaceutical composition according to claim 19.
22. A method for preparing a pharmaceutical composition useful for modulating body weight, the method comprising:

contacting a sequence #115 ligand with a mammalian sequence #115 in the presence and absence of a test compound;

determining whether the test compound alters the binding of the sequence #115 ligand to the mammalian sequence #115; and

combining the test compound that alters the binding of the sequence #115 ligand to the mammalian sequence #115 with a pharmaceutically acceptable carrier to create a pharmaceutical composition useful for modulating body weight.

23. A method for the treatment of obesity comprising administering, to a patient in need thereof, the pharmaceutical composition according to claim 22.

24. A method for the treatment of cachexia comprising administering, to a patient in need thereof, the pharmaceutical composition according to claim 22.

25. The method of claim 1, wherein the mammalian sequence #115 is murine sequence #115.

26. The method of claim 2, wherein the mammalian sequence #115 is murine sequence #115.

27. The method of claim 7, wherein the mammalian sequence #115 is murine sequence #115.

28. The method of claim 19, wherein the mammalian sequence #115 is murine sequence #115.

29. The method of claim 22, wherein the mammalian sequence #115 is murine sequence #115.

30. The method of claim 1, wherein the mammalian sequence #115 is human sequence #115.

31. The method of claim 2, wherein the mammalian sequence #115 is human sequence #115.

32. The method of claim 7, wherein the mammalian sequence #115 is human sequence #115.

33. The method of claim 19, wherein the mammalian sequence #115 is human sequence #115.

34. The method of claim 22, wherein the mammalian sequence #115 is human sequence #115.

35. An antibody that recognizes an isolated polypeptide comprising the amino acid sequence of SEQ ID NO:6.

36. An antibody that recognizes an isolated polypeptide which is encoded by a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:5.